Responsive Grid System

Responsive Grid System Play+ provides a powerful, responsive grid system based on Bootstrap's 12-column layout. This system enables you to create flexible, mobile-first layouts that adapt seamlessly across different screen sizes. Overview ■ The grid system consists of: 12-column layout for maximum flexibility 6 responsive breakpoints (xs, sm, md, lg, xl, xxl) Container classes for content wrapping Column classes for layout control Utility classes for advanced positioning Breakpoints ■ Breakpoint Class Prefix Min Width Container Max Width Extra small None < 576px Auto Small sm- ≥ 576px 540px Medium md- ≥ 768px 720px Large lg- ≥ 992px 960px Extra large xl- ≥ 1200px 1140px Extra extra large xxl- ≥ 1400px 1320px Containers ■ Basic Container ■ < div class = " container " > <!-- Content with responsive max-width --> </ div > Fluid Container ■ < div class = " container-fluid " > <!-- Content that spans full width --> </ div > Grid Columns ■ Basic Column Classes ■ < div class = " row " > < div class = " col-6 " > Half width </ div > < div class = " col-6 " > Half width </ div > </ div > Responsive Columns ■ < div class = " row " > < div class = " col-12 col-md-6 col-lg-4 " > <!-- Full width on mobile, half on tablet, third on desktop --> </ div > < div class = " col-12 col-md-6 col-lg-4 " > <!-- Full width on mobile, half on tablet, third on desktop --> </ div > < div class = " col-12 col-lg-4 " > <!-- Full width on mobile/tablet, third on desktop --> </ div > </ div > Auto-sizing Columns ■ < div class = " row " > < div class = " col " > Auto-sized </ div > < div class = " col " > Auto-sized </ div > < div class = " col " > Auto-sized </ div > </ div > Column Widths ■ Class Width Description .col-1 8.333% 1/12 of container .col-2 16.667% 2/12 of container .col-3 25% 3/12 of container .col-4 33.333% 4/12 of container .col-5 41.667% 5/12 of container .col-6 50% 6/12 of container .col-7 58.333% 7/12 of container .col-8 66.667% 8/12 of container .col-9 75% 9/12 of container .col-10 83.333% 10/12 of container .col-11 91.667% 11/12 of container .col-12 100% Full width .col-auto Auto Content-based width Row Columns ■ Control how many columns appear in a row: < div class = " row row-cols-1 row-cols-md-2 row-cols-lg-3 " > < div class = " col " > 1 column per row on mobile </ div > < div class = " col " > 2 columns per row on tablet </ div > < div class = " col " > 3 columns per row on desktop </ div > </ div > Gutters ■ Default Gutters ■ < div class = " row " > < div class = " col " > With default gutters </ div > </ div > No Gutters ■ < div class = " row no-gutters " > < div class = " col " > No spacing between columns </ div > </ div > Custom Gutter Sizes ■ < div class = " row g-0 " > <!-- No gutters --> < div class = " row g-1 " > <!-- 0.25rem gutters

--> < div class = " row g-2 " > <!-- 0.5rem gutters --> < div class = " row g-3 " > <!-- 1rem gutters --> < div class = " row g-4 " > <!-- 1.5rem gutters --> < div class = " row g-5 " > <!-- 3rem gutters --> </ div > </ div > </ div > </ div > </ div > </ div > Directional Gutters ■ < div class = " row gx-3 " > <!-- Horizontal gutters only --> < div class = " row gy-2 " > <!-- Vertical gutters only --> </ div > </ div > Offsets ■ Move columns to the right using offset classes: < div class = " row " > < div class = " col-4 offset-4 " > Centered column </ div > < div class = " col-3 offset-3 " > Offset by 3 columns </ div > </ div > Push and Pull ■ Reposition columns using push and pull classes: < div class = " row " > < div class = " col-9 push-3 " > Pushed to the right </ div > < div class = " col-3 pull-9 " > Pulled to the left </ div > </ div > Card Layout ■ < div class = " container " > < div class = " row row-cols-1 row-cols-md-2 row-cols-lg-3 g-4 " > < div class = " col " > < div class = " card " > < div class = " card-body " > < h5 class = " card-title " > Card 1 </ h5 > < p class = " card-text " > Responsive card layout </ p > </ div > </ div > </ div > < div class = " col " > < div class = " card " > < div class = " card-body " > < h5 class = " card-title " > Card 2 </ h5 > < p class = " card-text " > Responsive card layout </ p > </ div > </ div > </ div > < div class = " col " > < div class = " card " > < div class = " card-body " > < h5 class = " card-title " > Card 3 </ h5 > < p class = " card-text " > Responsive card layout </ p > </ div > </ div > </ div > </ div > </ div > Sidebar Layout ■ < div class = " container-fluid " > < div class = " row " > < div class = " col-12 col-lg-3 " > < aside class = " sidebar " > <!-- Sidebar content --> </ aside > </ div > < div class = " col-12 col-lg-9 " > < main class = " main-content " > <!-- Main content --> </ main > </ div > </ div > </ div > Form Layout ■ < div class = " container " > < form > < div class = " row " > < div class = " col-md-6 " > < label for = " firstName " > First Name </ label > < input type = " text " class = " form-control " id = " firstName " /> </ div > < div class = " col-md-6 " > < label for = " lastName " > Last Name </ label > < input type = " text " class = " form-control " id = " lastName " /> </ div > </ div > < div class = " row " > < div class = " col-12 " > < label for = " email " > Email </ label > < input type = " email " class = " form-control " id = " email " /> </ div > </ div > </ form > </ div > Best Practices ■ Mobile-first approach : Start with mobile layouts and enhance for larger screens Use semantic HTML : Combine grid classes with meaningful HTML structure Test across breakpoints : Ensure layouts work well at all screen sizes Avoid nesting too deeply : Keep grid nesting to a minimum for maintainability Use appropriate containers : Choose between .container and .container-fluid based on your design needs CSS Custom Properties ■ The grid system uses CSS custom properties for gutters: :root { --mdb-gutter-x : 1.5 rem ; /* Horizontal gutter */ --mdb-gutter-y : 0 ; /* Vertical gutter */ } You can customize these

values in your theme or override them for specific components.

```html
<div class="container">
  <!-- Content with responsive max-width -->
</div>
```

```html
<div class="container-fluid">
  <!-- Content that spans full width -->
</div>
```

```html
<div class="row">
  <div class="col-6">Half width</div>
  <div class="col-6">Half width</div>
</div>
```

```html
<div class="row">
  <div class="col-12 col-md-6 col-lg-4">
    <!-- Full width on mobile, half on tablet, third on desktop -->
  </div>
  <div class="col-12 col-md-6 col-lg-4">
    <!-- Full width on mobile, half on tablet, third on desktop -->
  </div>
  <div class="col-12 col-lg-4">
    <!-- Full width on mobile/tablet, third on desktop -->
  </div>
</div>
```

```html
<div class="row">
  <div class="col">Auto-sized</div>
  <div class="col">Auto-sized</div>
  <div class="col">Auto-sized</div>
</div>
```

```html
<div class="row row-cols-1 row-cols-md-2 row-cols-lg-3">
  <div class="col">1 column per row on mobile</div>
  <div class="col">2 columns per row on tablet</div>
  <div class="col">3 columns per row on desktop</div>
```

```
    </div>
```

```
<div class="row">
  <div class="col">With default gutters</div>
</div>
```

```
<div class="row no-gutters">
  <div class="col">No spacing between columns</div>
</div>
```

```
<div class="row g-0">
  <!-- No gutters -->
  <div class="row g-1">
    <!-- 0.25rem gutters -->
    <div class="row g-2">
      <!-- 0.5rem gutters -->
      <div class="row g-3">
        <!-- 1rem gutters -->
        <div class="row g-4">
          <!-- 1.5rem gutters -->
          <div class="row g-5"><!-- 3rem gutters --></div>
        </div>
      </div>
    </div>
  </div>
</div>
```

```
<div class="row gx-3">
  <!-- Horizontal gutters only -->
  <div class="row gy-2"><!-- Vertical gutters only --></div>
</div>
```

```
<div class="row">
  <div class="col-4 offset-4">Centered column</div>
  <div class="col-3 offset-3">Offset by 3 columns</div>
</div>
```

```
---

<div class="row">
  <div class="col-9 push-3">Pushed to the right</div>
  <div class="col-3 pull-9">Pulled to the left</div>
</div>


---

<div class="container">
  <div class="row row-cols-1 row-cols-md-2 row-cols-lg-3 g-4">
    <div class="col">
      <div class="card">
        <div class="card-body">
          <h5 class="card-title">Card 1</h5>
          <p class="card-text">Responsive card layout</p>
        </div>
      </div>
    </div>
    <div class="col">
      <div class="card">
        <div class="card-body">
          <h5 class="card-title">Card 2</h5>
          <p class="card-text">Responsive card layout</p>
        </div>
      </div>
    </div>
    <div class="col">
      <div class="card">
        <div class="card-body">
          <h5 class="card-title">Card 3</h5>
          <p class="card-text">Responsive card layout</p>
        </div>
      </div>
    </div>
  </div>
</div>


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<div class="container-fluid">
  <div class="row">
    <div class="col-12 col-lg-3">
      <aside class="sidebar">
        <!-- Sidebar content -->
      </aside>
    </div>
    <div class="col-12 col-lg-9">
      <main class="main-content">
        <!-- Main content -->
```

```html
      </main>
    </div>
  </div>
</div>
```

```html
<div class="container">
  <form>
    <div class="row">
      <div class="col-md-6">
        <label for="firstName">First Name</label>
        <input type="text" class="form-control" id="firstName" />
      </div>
      <div class="col-md-6">
        <label for="lastName">Last Name</label>
        <input type="text" class="form-control" id="lastName" />
      </div>
    </div>
    <div class="row">
      <div class="col-12">
        <label for="email">Email</label>
        <input type="email" class="form-control" id="email" />
      </div>
    </div>
  </form>
</div>
```

```css
:root {
  --mdb-gutter-x: 1.5rem; /* Horizontal gutter */
  --mdb-gutter-y: 0; /* Vertical gutter */
}
```